Bill Brewer
Granville Site Technical Committee
10805 Cahill Road
Raleigh, NC 27614

Via Express Mail

July 5, 2002

✓ KA. 7/11/02

*No air calc's for lb./day discharge.

Mr. Kevin Adler, Remedial Project Manager
U.S. Environmental Protection Agency, Region 5
Office of Superfund, Remedial & Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Subject: Granville Solvents Site Removal Action Quarterly Progress Report – Second Quarter 2002

Dear Mr. Adler:

I have enclosed two copies of the Second Quarter 2002 Report for the Removal Action at the Granville Solvents Site on behalf of the Granville Solvents Site PRP Group. Copies have been sent to the following individuals:

1. Mr. Steve Acree, U.S. EPA
2. Mr. Fred Myers, Ohio EPA
3. Mr. Joe Hickman, Manager, Village of Granville

If you have any questions regarding this report, please contact me at (919) 668-3218.

Regards,

Bill Brewer

William S. Brewer, Ph.D.
Granville Technical Committee Chair

cc: Peter Felitti, Regional Counsel, US EPA
Ben Pfefferle, Chairman, GSS PRP Group
Granville Technical Committee
G. Myers, Metcalf & Eddy
T. Struttmann, Sharp & Associates

Telephone 919-668-3218 Facsimile 919-684-2422 Email Brewe029@mc.duke.edu

GRANVILLE SOLVENTS SITE
REMOVAL ACTION QUARTERLY REPORT
FOR APRIL, MAY and JUNE, 2002

JULY 2002

Pursuant to the requirement set forth in the Administrative Order by Consent (AOC, September 7, 1994) between the U.S. EPA and the Granville Solvents Site (GSS) Potentially Responsible Parties (PRP) Group, in Section 2.5 – Reporting, and in a letter dated November 14, 1996, from Ms. Diane Spencer (U.S. EPA), this report constitutes the quarterly written progress report concerning actions undertaken pursuant to the AOC.

I. PROGRESS MADE DURING REPORTING PERIOD

Source Area Groundwater Control

The groundwater pumping and treatment system operated 720 hours in April, 744 hours in May, and 710 hours in June, for a total of 2,174 hours (98.64% of the total hours available) during the second quarter of 2002. Since operation of the treatment system began in December 1994, the system has been operating over 98.7% of the available time.

During the second quarter of 2002, the treatment system processed approximately 12.0 million gallons of water in April, 11.1 million gallons of water in May, and 9.6 million gallons of water in June for a total of 32.70 million gallons of water for the quarter. Since operation began in December 1994, the system has processed more than 896.8 million gallons of water.

During the second quarter of 2002, Metcalf & Eddy collected monthly air pressure measurements in the air-stripping unit's inlet and exhaust ducts to calculate airflow values. The airflow rate during the month of April averaged 1775 cfm, 1790 cfm in May, and 1630 cfm prior to acid washing the system in June and 2135 cfm following treatment.

M&E continued to perform scheduled monthly maintenance on the treatment system. This maintenance ensures that the system is performing at maximum efficiency and decreases unscheduled downtime. Maintenance included replacing bag filters, lubricating the transfer pump and blower motors, and maintaining the flow meters and level sensors.

Water samples were collected from the system's influent and effluent sampling ports on April 18, May 15, and June 12, 2002. Analytical results are listed in Table 1.

TABLE 1

VOCs	Influent April 14	Effluent April 14	Influent May 15	Effluent May 15	Influent June 12	Effluent June 12
1,1,1-trichloroethane	14.2 µg/l	ND	15.3 µg/l	ND	15.9 µg/l	ND
Cis-1,2-dichloroethene	3.3 µg/l	ND	3.1 µg/l	ND	2.8 µg/l	ND
Tetrachloroethene	18.1 µg/l	ND	15.3 µg/l	ND	16.4µg/l	0.32 ug/l
Trichloroethene	17.3 µg/l	ND	16.5 µg/l	ND	17.9 µg/l	0.44 ug/l
1,1-dichloroethylene	ND	ND	0.79	ND	ND	ND

Extraction well GSS-EW1 was operated at an average flow rate of approximately 125 gallons per minute (gpm) during the second quarter of 2002, whereas GSS-EW2 was operated at an average flow rate of approximately 126 gallons per minute (gpm) during the period. The total pumping rate from the two wells averaged 251 gpm for the second quarter of 2002 - 278 gpm for the month of April, 253 gpm for the month of May, and 222 gpm for the month of June.

The data in Table 1 represent groundwater treatment influent and effluent concentrations measured during the second quarter of 2002. Metcalf & Eddy has recorded that approximately 32.7 million gallons of water were processed in the second quarter of 2002. Based on these data, approximately 0.22 lb/day in April, 0.23 lb/day in May and 0.18 lb/day in June of total VOCs were discharged to the atmosphere during the reporting period.

Groundwater Monitoring Plan

Groundwater level measurements were collected on April 14, May 15, and June 10, 2002. These data were used to develop potentiometric surface maps with the map developed with the May 15 data attached to this report.

Source Area Soils

Sharp and Associates, Inc. (SHARP) continued operation of the air injection/air sparging/ and soil vapor extraction (AI/AS/SVE) system during the second quarter 2002.

The treatment system was tested and started up on September 9, 2001. The air injection and soil vapor extraction components were brought on line in late September. The air sparging component of the system was started up during October 2001 after the whole air sample confirmed that operation was below the de minimus air discharge of 10 lb/day.

A whole air sample was collected May 2, 2002. The laboratory method blank contained compounds normally detected at the site at measurable concentrations and additional compounds not normally detected. Therefore, the data listed in Table 2 may not be representative of the actual soil conditions. Analysis of the sample is listed below in Table 2:

TABLE 2

Volatile Compound	Air Sample 05/02/02
1,1-Dichloroethane	U *
cis-1,2-Dichloroethene	41 B*
1,1,1,-Trichloroethane	640 B*
Trichloroethene	1300 B*
Tetrachloroethene	920

NOTES:

- Represents qualified data.
  - 1,1-Dichloroethane was detected in the method blank. The concentration of 1,1-dichloroethane in the actual air sample was less than that detected in the method blank and is considered a laboratory artifact.
  - B indicates that the parameter was also detected in the laboratory method blank but at concentrations too low to be qualified as solely a laboratory artifact.

All concentrations are in $\mu g/m^3$ analyzed by EPA method TO-14 by Severn Trent Laboratories in Knoxville, TN.

System maintenance followed procedures outlined in the Removal Action Operations and Maintenance Manual (SHARP, October 26, 2001). To date, approximately 194 pounds of total VOCs have been removed with the SVE/AS/AI system. The removal rate has been maintained below the de minimus value of 10 lb/day. On November 13, 2001, Sharp began cycling the SVE wells to change the vapor stagnation points between vapor extraction wells and increase overall mass removal.

Active or Completed Tasks

The following specific tasks were completed during the reporting period:

- Collected water samples on April 14, May 15 and June 12, 2002 from the groundwater treatment system influent and effluent sampling ports.
- Collected water level measurements on April 14, May 15 and June 13, 2002.
- Collected groundwater treatment system airflow data on a monthly basis.
- Collected the annual suite of samples from the monitoring well network on May 6 and 7, 2002.
- Operated the SVE/AI/AS system per the plan.
- Collected air samples from SVE/AI/AS system on May 5, 2002.
- The soil area under the cover material was saturated with water in mid-June.
- Responded to soil treatment system alarms.
- Replaced the modem on the soil treatment telemetry system.
- Transferred water from the SVE system to the groundwater system.
- Replaced fuses on the AS compressor due to storm-related damage.
- Visited the site to clear level switches in the SVE knockout tank.

II. DELIVERABLES (CURRENT PERIOD AND NEXT PERIOD)

Current Period:

Deliverable	Due Date	Delivered
Quarterly Report	July 8, 2002	July 8, 2002

Next Period:

Deliverable	Due Date
Quarterly Report	October 7, 2002

III. DIFFICULTIES ENCOUNTERED & RESPONSE ACTIONS TAKEN THIS PERIOD

Issues with the alarm system and system down time were caused by problems with the site modem. The system was brought back on line and the modem was replaced.

Water from the SVE knockout drum filled the existing storage capacity requiring disposal. After approval from US EPA, the water was treated through the existing onsite groundwater treatment system.

IV. ANTICIPATED ACTIVITIES DURING NEXT REPORTING PERIOD

During the next reporting period, the following tasks will be performed:

- Collect potentiometric surface data on a monthly basis.
- Sample the groundwater treatment system influent and effluent water on a monthly basis.
- Perform scheduled maintenance of the groundwater treatment system
- Collect the quarterly suite of samples from the groundwater monitoring network.
- Continued operation, maintenance, and monitoring of the SVE, AS, and AI systems.

E 3,000 E 3,500 E 4,000 E 4,500 E 5,000

900.80

LEGEND

- MONITOR WELLS
- AIR MONITORING STATIONS
- EXTRACTION WELLS
- VILLAGE PRODUCTION WELLS
- OBSERVATION WELL
- * ELEV. NOT USED

Nonresponsive map showing municipal well locations

N 4,500

SCALE IN FEET
0 100' 200'

Metcalf & Eddy

GRANVILLE SOLVENTS SITE

POTENTIOMETRIC SURFACE MAY 15, 2002

GRANVILLE, OHIO

FILE NAME	CHECKED	DRAWN	DATE	PROJECT NO.	FIGURE
POTMAY02	JP	JAW	–	016688	1